

CLAIMS

1. A reward method including the steps of:
communicating between a beacon and a mobile device to determine
5 whether the mobile device is within a predetermined locale; and
crediting the mobile device to reward the user of the mobile device for
presence within that locale.
2. A reward method according to Claim 1, wherein the mobile
10 device is credited with an amount depending on the length of time the mobile
device is within the predetermined locale to reward the user of the mobile
device for continued presence within that locale.
3. A reward method according to Claim 1, wherein the mobile
15 device is credited if the mobile device is within the predetermined locale within
a predetermined time interval.
4. A reward method according to Claim 1, comprising:
broadcasting, from at least one beacon, signals that can be received
20 within the predetermined locale;
receiving the signals broadcast by the at least one beacon on a mobile
device when the mobile device is within the locale;
sending an identification signal from the mobile device to a verification
system;
25 determining in the verification system the time that the mobile device is
within range of the at least one beacon; and
crediting the mobile device identified by the identification signal.
5. A reward method according to Claim 4, wherein:
30 the mobile device makes a connection with the beacon when within
range;

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the beacon receives the identification signal from the mobile device through the connection; and

the beacon passes the identification signal to the verification system to credit the identified mobile device when the mobile device is in connection with the beacon.

6. A reward method according to Claim 5, wherein the beacon periodically polls the mobile device to determine whether the mobile device is within range.

7. A reward method according to Claim 1, including the steps of: broadcasting a sequence of identification data sets from the beacon; recording in the mobile device information based on the broadcast identification data sets;

presenting the recorded information for verification to determine the length of time the mobile device remained within the vicinity of the beacon; and crediting the mobile device with credit if it is determined that the mobile device was within the vicinity of the beacon.

8. A reward method according to Claim 7, including the step of presenting the user of the mobile device with an option to send the recorded information for validation, and of presenting the recorded information for verification when the option is selected.

9. A reward method according to Claim 7, wherein: the beacon broadcasts a sequence of data sets comprising an identification number that varies with each broadcast data set; and the mobile device accumulates the broadcast identification numbers in a register; wherein

the content of the register is presented for verification to determine the length of time the mobile device remained within the vicinity of the beacon.

10. A reward method according to Claim 9, wherein the identification numbers are pseudo-random numbers.

11. A reward method according to Claim 7, wherein the data sets
5 periodically broadcast by the beacon include a locale identifier indicating the locale and a time or sequence number that records the time.

12. A reward method according to Claim 7, including:
transmitting information recorded by the mobile device to an
10 intermediary;
communicating information regarding the data sets broadcast from the beacon to the intermediary;
comparing in the intermediary the information received from the mobile device with the information regarding the broadcast data sets to determine the
15 length of time that the mobile device is within a locale; and
outputting a credit to the account of the user of the mobile device.

13. A reward method according to Claim 1, wherein the mobile device and the beacon communicate using Bluetooth protocols.

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14. A reward method according to Claim 7, wherein the mobile device and the beacon communicate using Bluetooth protocols and the data sets broadcast by the beacon are embedded in the inquiry phase of a Bluetooth message signal.

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15. A reward method according to Claim 1, wherein the step of crediting the mobile device sends an electronic coupon exchangeable for goods or services to the mobile device.

16. A reward method according to Claim 1, wherein the step of crediting the mobile device credits an account corresponding to the user of the mobile device.

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17. A system for crediting mobile devices, comprising:
a beacon for transmitting signals to be received by mobile devices within range of the beacon; and
5 a verification system for receiving a signal from a mobile device, identifying the mobile device, determining whether the mobile device is or was within range of the beacon and crediting the mobile device if the mobile device was within range.
- 10 18. A system according to Claim 17, wherein the beacon is a Bluetooth beacon.
19. A system according to Claim 17, wherein:
the beacon includes a transceiver for establishing two-way
15 communication with a mobile device within range and thereby receiving identification information identifying the mobile device;
the verification system includes a data store for recording the credit in user accounts; and
the transceiver is connected to the verification system to pass the
20 identification information to the verification system so that the user account corresponding to the mobile device can be identified and credited.
20. A system according to Claim 17, wherein:
the at least one beacon transmits a sequence of identification data sets;
25 the verification system contains code for receiving a verification signal from the mobile device and validating the verification signal against the transmitted sequence of identification data sets to determine the length of time that the mobile device remains within range of the at least one beacon.
- 30 21. A mobile device for use in a reward system, including:

a transceiver for receiving local transmitted signals containing identification information when the mobile device is located in a locale containing a beacon transmitting the signals;

a memory store; and

5 code for carrying out the steps of recording in the memory store information based on the broadcast identification data sets and causing the mobile device to transmit the recorded information to a verification system so that the length of time the mobile device remains within the vicinity of the beacon can be determined and the user of the mobile phone rewarded for
10 remaining in the locale.

22. A mobile device according to Claim 21, wherein the transceiver is a Bluetooth transceiver.

15 23. A mobile device according to Claim 21, for use with a beacon that broadcasts a sequence of data sets, each data set including an identification number that varies with each broadcast data set; wherein

the code accumulates the broadcast identification numbers in a register in the memory of the mobile device and transmits the contents of the register
20 for verification to determine the length of time the mobile device remained within the vicinity of the beacon.

24. A method of crediting or debiting a mobile device including the steps of:

25 communicating between a beacon and a mobile device to determine whether the mobile device is within a predetermined locale; and

crediting or debiting the mobile device to reward or charge the user of the mobile device for presence within that locale.

30 25. A method according to Claim 24, including:

broadcasting, from at least one beacon, signals that can be received within the predetermined locale;

establishing a connection between a beacon and a mobile device when a mobile device is within a predetermined locale;

receiving at the beacon an identification signal from the mobile device through the connection;

- 5 crediting or debiting the mobile device corresponding to the identification system to charge the user of the mobile device for presence within that locale.

- 10 26. A method according to Claim 24, wherein the mobile device is credited or debited with an amount depending on the length of time the mobile device is within the predetermined locale to reward or charge the user of the mobile device for continued presence within that locale.

- 15 27. A method according to Claim 24, wherein the mobile device is debited if the mobile device is within the predetermined locale within a predetermined time interval.

28. A method according to Claim 24, wherein the connection between the beacon and the mobile device is a Bluetooth connection.